CAMP N SID SEN (PWSNO 1280031)
SOURCE WATER ASSESSMENT REPORT

May 16, 2001

State of Idaho
Department of Environmental Quality

Source Water Assessment for Camp N Sid Sen

Under the Federal Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency (EPA) to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the Act. The Idaho Department of Environmental Quality is completing the assessments for all Idaho public drinking water systems. The assessment for your particular drinking water source is based on a land use inventory within a 1,000-foot radius around your well, sensitivity factors associated with the well's construction and characteristics associated with either your aquifer or the watershed in which you live.

This report, *Source Water Assessment for Camp N Sid Sen* describes the public drinking water source, the potential contaminant sites located within a 1000-foot boundary around the well, and the susceptibility (risk) that may be associated with any potential contaminants. This assessment, taken into account with local knowledge and concerns, should be used as a planning tool to develop and implement appropriate protection measures for this system. **The results should not be used as an absolute measure of risk and are not intended to undermine the confidence in your water system.**

Potential Contaminant Inventory. Camp N Sid Sen, located on the east side of Coeur d'Alene Lake, gets its drinking water from a 140-foot deep well drilled in 1990. Potential contaminant sites documented inside the 1000-foot boundary around the well include surface water, public and private roads, and the camp drainfields.

Water samples submitted for testing in October through December 1998, April 1998, September through November 1995 and December 1993 were positive for Total Coliform Bacteria. Samples have been free on bacterial contaminants since a new reservoir and connector main were installed in 1999. Annual Nitrate tests show concentrations ranging from 0.024 mg/l to 1.79 mg/l, well below the Maximum Contaminant Level of 10 mg/l. The map on page 4 of this report shows the well location, the 1000-foot boundary around the well and approximate locations of potential contaminant sites inside the boundary. Table 1 summarizes additional information about the potential contaminant sites.

Table 1. Camp N Sid Sen Potential Contaminant Inventory

Map ID	Site Description	Source of Information	Potential Contaminants
1	Surface Water	USGS Map	Microbial
2	Roads	USGS MAP	IOC, VOC, SOC, Microbial
3	Septic Drainfield	PWS File	IOC, Microbial

IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Well Construction and Hydrogeologic Sensitivity. The Camp N Sid Sen well was drilled in September 1990.into a broken basalt formation with a 28 foot thick interbed of red clay. The 100-foot deep casing for the well terminates in the clay layer, but the 60-foot deep surface seal ends in a more permeable broken basalt layer. The static water level in the well is 9 feet below the surface.

The well is outside the 100-year flood plain for the lake. Soils in the 1000-foot zone around the well are generally moderately to well drained. A sanitary survey conducted February 4, 1999 indicates that the well casing extends 2 feet above ground level and the wellhead and surface seal are properly maintained. The susceptibility analysis worksheet for your well on page 5 of this report shows all the criteria used for scoring the well.

Susceptibility. The Camp N Sid Sen well automatically ranked moderately susceptible to all classes of contaminants, mostly because of construction factors and natural geologic characteristics specific to the site where it was drilled. The Susceptibility Analysis Worksheet shows formulas used to determine final scores for the well, and the susceptibility ranking categories.

Protection Measures. This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a "pristine" area or an area with numerous industrial and/or agricultural land uses, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

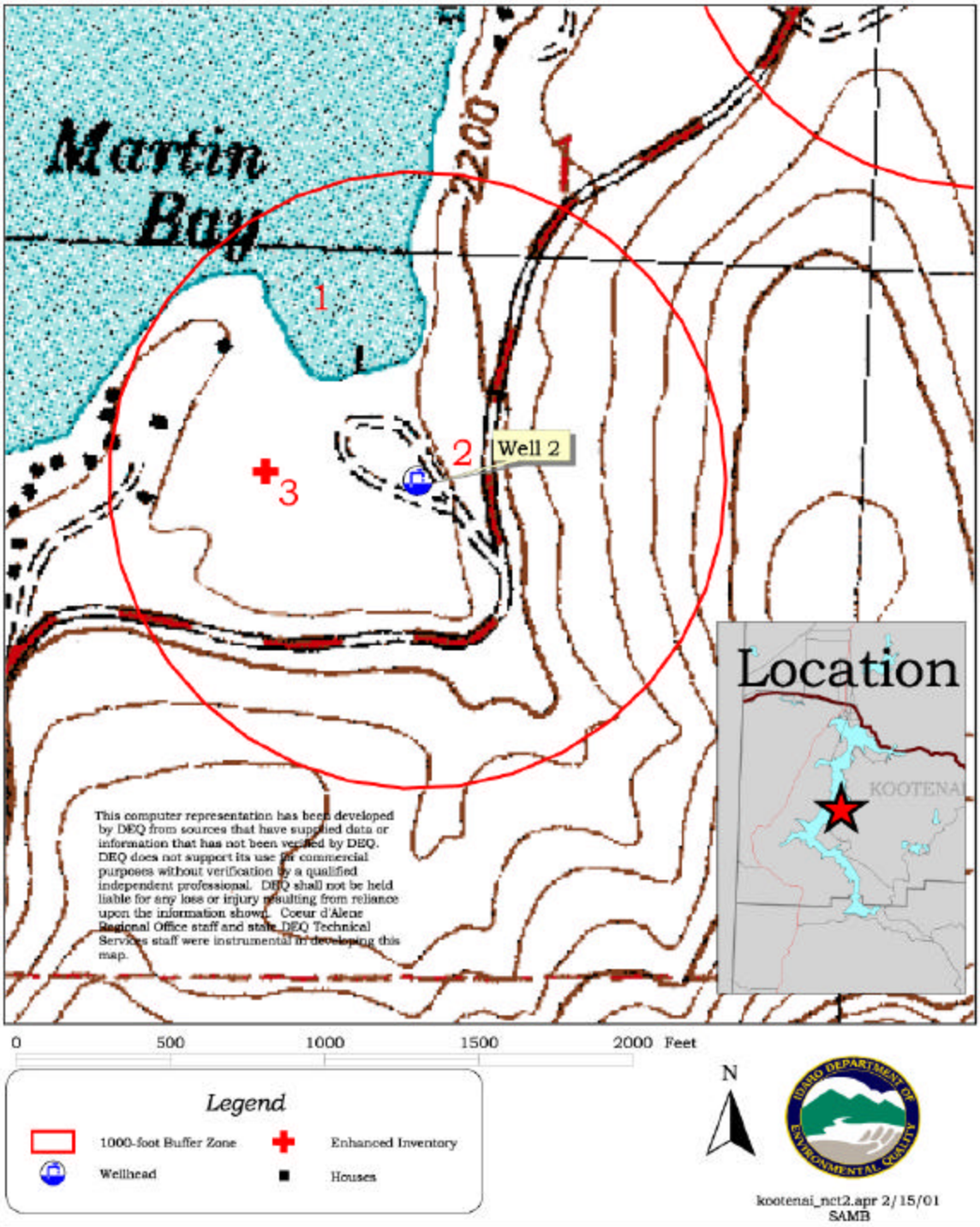
In 1999, Camp N Sid Sen up graded its reservoir and connector main. The camp also had Mike Nelson of Panhandle Health inspect alternative sites for a new well in conjunction with the sanitary survey he conducted that year. At the current well and near any new wells that may be drilled it is important to maintain the sanitary set backs as areas free from use or storage of fertilizers, pesticides herbicides and solvents. Proper septic system maintenance is important for prevention of microbial and nitrate contamination. Because Camp N Sid Sen doesn't have jurisdiction over the entire 1000-foot zone around the well, partnerships with neighbors and the highway district should be formed to regulate activities that could degrade the ground water. Camp N Sid Sen should identify potential emergency situations that could affect ground water and work out response procedures. Source water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term.

For assistance in developing source water protection strategies please contact Tony Davis at the Coeur d'Alene Regional DEQ office at 208 769-1422.

DEQ website:

http://www.deq.state.id.us

Figure 1. Camp N Sid Sen. Delineation and Potential Contaminant Inventory.



Attachment A

Camp N Sid Sen
Susceptibility Analysis
Worksheet

Ground Water Susceptibility Analysis

Public Water System Name : **CAMP N SID SEN UNITED CHURCH OF CHRIST** **WELL #2**

Public Water System Number : **1280031** 3/12/01 10:15:12 AM

1. System Construction		SCORE
Drill Date	9/1/90	
Driller Log Available	YES	
Sanitary Survey (if yes, indicate date of last survey)	YES	1999
Well meets IDWR construction standards	NO	1
Wellhead and surface seal maintained	YES	0
Casing and annular seal extend to low permeability unit	NO	2
Highest production 100 feet below static water level	NO	1
Well located outside the 100 year flood plain	YES	0
Total System Construction Score		**4**

2. Hydrologic Sensitivity		
Soils are poorly to moderately drained	NO	2
Vadose zone composed of gravel, fractured rock or unknown	YES	1
Depth to first water > 300 feet	NO	1
Aquitard present with > 50 feet cumulative thickness	NO	2
Total Hydrologic Score		**6**

3. Potential Contaminant / Land Use - SANITARY SETBACK			IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Sanitary Setback	RANGELAND, WOODLAND, OTHER		0	0	0	0
Farm chemical use high	NO		0	0	0	
IOC, VOC, SOC, or Microbial sources in Sanitary Setback	YES	Positive Bacterial Samples	NO	NO	NO	NO
Total Potential Contaminant Source/Land Use Score - Sanitary Setback			**0**	**0**	**0**	**0**
Potential Contaminant / Land Use - 1000-FOOT BOUNDARY						
Contaminant sources present (Number of Sources)	YES		2	1	1	3
(Score = # Sources X 2) 8 Points Maximum			4	2	2	6
Sources of Class II or III leacheable contaminants or Microbials	YES		2	1	1	
4 Points Maximum			2	1	1	
1000-Foot Boundary contains or intercepts a Group 1 Area	NO		0	0	0	0
Land use 1000-Foot Boundary	Less Than 25% Agricultural Land		0	0	0	0
Total Potential Contaminant Source / Land Use Score - 1000-Foot Boundary			**6**	**3**	**3**	**6**
Cumulative Potential Contaminant / Land Use Score			**6**	**3**	**3**	**6**
4. Final Susceptibility Source Score			**12**	**11**	**11**	**12**
5. Final Well Ranking			**Moderate**	**Moderate**	**Moderate**	**Moderate**

The final scores for the susceptibility analysis were determined using the following formulas:

1) VOC/SOC/IOC Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.27)

2) Microbial Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.35)

Final Susceptibility Ranking:

0 - 5 Low Susceptibility

6 - 12 Moderate Susceptibility

> 13 High Susceptibility

POTENTIAL CONTAMINANT INVENTORY
LIST OF ACRONYMS AND DEFINITIONS

AST (Aboveground Storage Tanks) – Sites with aboveground storage tanks.

Business Mailing List – This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

CERCLIS – This includes sites considered for listing under the **Comprehensive Environmental Response Compensation and Liability Act (CERCLA)**. CERCLA, more commonly known as ASuperfund@ is designed to clean up hazardous waste sites that are on the national priority list (NPL).

Cyanide Site – DEQ permitted and known historical sites/facilities using cyanide.

Dairy – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

Deep Injection Well – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

Enhanced Inventory – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (DEQ) during the primary contaminant inventory.

Floodplain – This is a coverage of the 100year floodplains.

Group 1 Sites – These are sites that show elevated levels of contaminants and are not within the priority one areas.

Inorganic Priority Area – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

Landfill – Areas of open and closed municipal and non-municipal landfills.

LUST (Leaking Underground Storage Tank) – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

Mines and Quarries – Mines and quarries permitted through the Idaho Department of Lands.)

Nitrate Priority Area – Area where greater than 25% of wells/springs show nitrate values above 5mg/l.

NPDES (National Pollutant Discharge Elimination System) – Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

Organic Priority Areas – These are any areas where greater than 25 % of wells/springs show levels greater than 1% of the primary standard or other health standards.

Recharge Point – This includes active, proposed, and possible recharge sites on the Snake River Plain.

RICRIS – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities) – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

Toxic Release Inventory (TRI) – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

UST (Underground Storage Tank) – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

Wastewater Land Applications Sites – These are areas where the land application of municipal or industrial wastewater is permitted by DEQ.

Wellheads – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

NOTE: Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

Where possible, a list of potential contaminant sites unable to be located with geocoding will be provided to water systems to determine if the potential contaminant sources are located within the source water assessment area.